

## CLAIMS

The invention claimed is:

- 5 1. A method of processing a plurality of ordered symbol sequences, said method comprising the step of processing a symbol holding a place in said plurality of sequences.
- 10 2. The method of claim 1 wherein said step of processing a symbol holding a place in said plurality of sequences comprises the step of reducing a first number of said symbols to a lesser number of symbols.
- 15 3. The method of claim 2 wherein said lesser number of symbols includes all information included in said first number of symbols.
- 20 4. The method of claim 2 wherein said step of reducing a first number of said symbols to a lesser number of symbols comprises the step of replacing a plurality of a repeating symbol with an indicator of a number of repetitions of said symbol.
- 25 5. The method of claim 2 wherein said step of reducing a first number of said symbols to a lesser number of symbols comprises the steps of:
  - (a) identifying a pattern in an order of said symbols;
  - (b) assigning a code symbol to pattern; and
  - (c) replacing said symbols of said pattern with said code symbol.
6. The method of claim 2 wherein said lesser number of symbols includes less information than included in said first number of symbols.

7. A method of processing a plurality of ordered symbol sequences, said method comprising the steps of:

- (a) processing a symbol holding a place in said plurality of sequences with a first process;
- 5 (b) processing said symbol with a second process; and
- (c) retaining a result of said processing with one of said first and said second processes.

8. The method of claim 7 wherein at least one of said first process and said  
10 second process comprises a step of reducing a first number of said symbols to a lesser number of symbols comprising all information included in said first number of symbols.

9. The method of claim 8 wherein said step of reducing a first number of said  
15 symbols to a lesser number of symbols comprises the step of replacing a plurality of a repeating symbol with an indicator of a number of repetitions of said symbol.

10. The method of claim 8 wherein said step of reducing a first number of said  
20 symbols to a lesser number of symbols comprises the steps of:

- (a) identifying a pattern in an order of said symbols;
- (b) assigning a code symbol to pattern; and
- (c) replacing said symbols of said pattern with said code symbol.

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11. The method of claim 7 wherein at least one of said first process and said second process comprises a step of reducing a first number of said symbols to a lesser number of symbols containing less information than said first number of symbols.

12. The method of claim 7 wherein the step of retaining a result of said processing with one of said first and said second processes comprises the step of retaining said result of said processing comprising a lesser number of symbols.

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13. A method of processing an image comprising the steps of:

(a) decomposing said image to an array of pixels;

(b) recording a luminosity of a pixel as an ordered symbol sequence;

10 (c) partitioning a plurality of said ordered symbol sequences into at least one bit plane comprising a plurality of said symbols holding a place in said plurality of said sequences; and

(d) processing said symbols of said bit plane.

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14. The method of claim 13 wherein said step of processing said symbols of said bit plane comprises the step of reducing a first number of said symbols to a lesser number of symbols.

20 15. The method of claim 14 wherein said lesser number of symbols includes all information included in said first number of symbols.

16. The method of claim 14 wherein said step of reducing a first number of said symbols to a lesser number of symbols comprises the step of replacing a plurality of a repeating symbol with an indicator of a number of repetitions of said symbol.

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17. The method of claim 14 wherein said step of reducing a first number of said symbols to a lesser number of symbols comprises the steps of:

- (a) identifying a pattern in an order of said symbols;
- (b) assigning a code symbol to said pattern; and
- 5 (c) replacing said symbols of said pattern with said code symbol.

18. The method of claim 14 wherein said lesser number of symbols includes less information than included in said first number of symbols.

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19. The method of claim 13 wherein the step of partitioning a plurality of said ordered symbol sequences into at least one bit plane comprising a plurality of said symbols holding a place in said plurality of said sequences comprises the step of including in said bit plane symbols holding a plurality of said  
15 places in an ordered sequence, said plurality of places being less than all of said places included in said sequence.

20. The method of claim 13 wherein the step of processing said symbols of a bit plane comprises the steps of:

- 20 (a) processing said symbols with a first process;
- (b) processing said symbols with a second process; and
- (c) retaining a result of said processing with one of said first and said second processes.

25 21. The method of claim 20 wherein at least one of said first process and said second process comprises a step of reducing a first number of said symbols to a lesser number of symbols comprising all information included in said first number of symbols.

22. The method of claim 20 wherein at least one of said first process and said second process comprises a step of reducing a first number of said symbols to a lesser number of symbols containing less information than said first number of symbols.

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23. The method of claim 20 wherein the step of retaining a result of said processing with one of said first and said second processes comprises the step of retaining said result of said processing comprising a lesser number of symbols.

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24. The method of claim 13 wherein the step of recording a luminosity of a pixel as an ordered symbol sequence comprises the steps of:

(a) decomposing a pixel of said array to a color plane pixel having a luminosity corresponding an intensity of a component color of said pixel; and

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(b) recording said luminosity of said color plane pixel as an ordered symbol sequence.